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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/648,164	08/26/2003	Larry D. Kinsman	3396.8US (97-0696.08/US)	3536
24247	7590	09/13/2006	EXAMINER	
TRASK BRITT P.O. BOX 2550 SALT LAKE CITY, UT 84110			TRAN, TAN N	
			ART UNIT	PAPER NUMBER
			2826	

DATE MAILED: 09/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/648,164

Applicant(s)

KINSMAN ET AL.

Examiner

TAN N. TRAN

Art Unit

2826

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on amendment filed on 06/15/06.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 17,18,22 and 23 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-13 is/are allowed.
- 6) ☒ Claim(s) 14-16 and 19-21 is/are rejected.
- 7) ☒ Claim(s) 24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 14-16,19-21 stand rejected under 35 U.S.C. 102(b) as being anticipated by Perino et al. (6,007,357).

With regard to claim 14,21, Perino et al. discloses device comprising: at least one semiconductor device 840 including a plurality of contacts 842 located proximate a single edge of thereof; it is inherent that a retainer 830 having at least one receptacle configured to receive another edge of the at least one semiconductor device 840 in order to retain the semiconductor

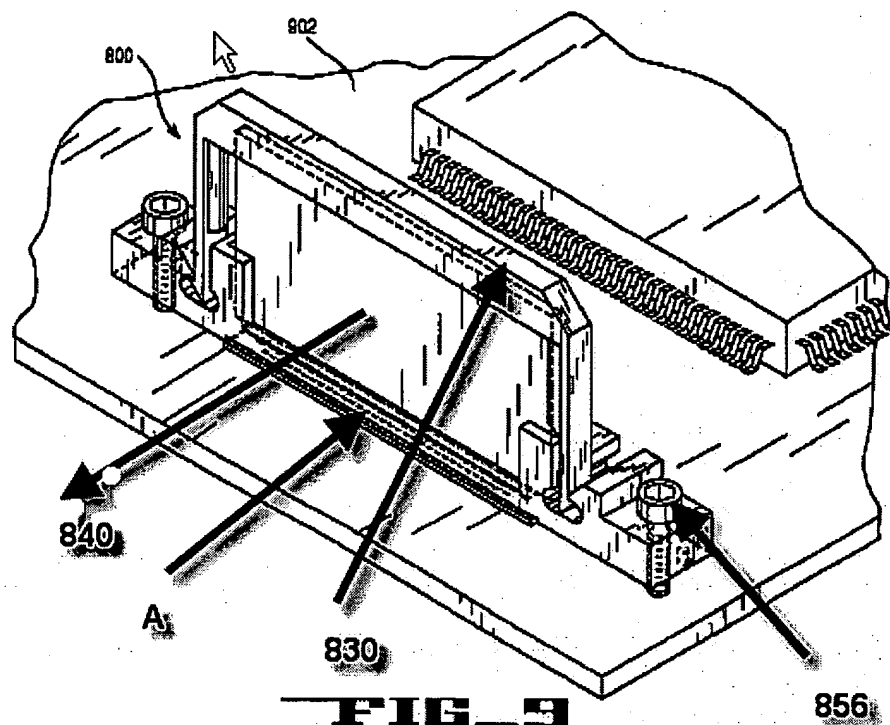
chip in the base; and at least one mounting element 856 associated with the retainer 830 and configured to secure the at least one semiconductor 840 to a carrier 902. (Note see fig on page 6 of this office action, and figs. 8,9 of Perino et al.).

With regard to claims 15,19, Perino et al. discloses an alignment device A configured to be mounted to the carrier 902 wherein the alignment device A includes at least one receptacle configured to receive at least the single edge of the at least one semiconductor device 840. (Note see fig on page 6 of this office action, and figs. 8,9 of Perino et al.).

With regard to claim 16, Perino et al. discloses the alignment device A is configured to engage by the at least one mounting element 856. (Note see fig below, and figs. 8,9 of Perino et al.).

With regard to claim 20, it is inherent that Perino et al. discloses a plurality of contacts are positioned within the at least one receptacle so as to facilitate electrical connection with corresponding contacts 842 of the at least one semiconductor device 840 in order to secure the electrical connection between the semiconductor and alignment device.

With regard to claim 16, Perino et al. discloses the alignment device A is configured to engage by the at least one mounting element 856. (Note see fig below, and figs. 8,9 of Perino et al.).



Allowable Subject Matter

2. Claims 1-13 are allowable over the prior art of record, because none of these references disclose or can be combined to yield the claimed invention such as an alignment device with at least one receptacle formed therein configured to received at least a portion of at least one semiconductor device in nonparallel orientation relative to a carrier substrate; and at least one semiconductor device assembly including a mounting element with a receptacle configured to receive at least a portion of the at least one semiconductor device as recited in claim 1, and at

least a portion of the at least one semiconductor device being disposed in a receptacle of a mounting element; and an alignment device including at least one receptacle configured to received at least an edge of the at least one semiconductor device with the at least one semiconductor device being oriented nonparallel to a carrier substrate as recited in claim 10.

3. Claim 24 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 24 is allowable over the prior art of record, because none of these references disclose or can be combined to yield the claimed invention such as at least one semiconductor device is within the at least one receptacle of the retainer with an adhesive material.

Response to Arguments

4. Applicant's arguments filed 06/15/06 have been fully considered but they are not persuasive.

It is argued, at page 8 of the remarks, that "Perino does not expressly or inherently describe a semiconductor device package with a retainer including at least one receptacle configured to receive an edge of at least one semiconductor device". However, it is inherent that Perino et al. discloses a retainer 830 having at least one receptacle configured to receive another edge of the at least one semiconductor device 840 in order to retain the semiconductor chip in the base. Note lines 47-50, column 10, fig. 9, are cited to support for the inherent position. Thus, applicant's claims 14-16,19-21 do not distinguish over Perino et al. reference.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

NATHAN S. FLYNN
SUPERVISORY PATE
TECHNOLOGY

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Tan Tran whose telephone number is (571) 272-1923. The examiner can normally be reached on M-F 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (571) 272-1915. The fax phone numbers for the organization where this application or proceeding is assigned are (571) 273-8300 for regular communications and (571) 273-8300 for after final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

TT

Aug 2006